

REFLECTIONS

UPON THE

Hypothesis

OF

ALCALI and ACIDUM.

By the Honourable

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L O N D O N,

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THOUGH the following Discourse was at first written by way of *Appendix* to the Treatise of the Imperfection of the Chymical Doctrine of Qualities; yet the bulk of it, swelling beyond what was foreseen, made it seem expedient to publish it as a Tract by it self.

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CHAP. I.

I Presume, it will not be difficult to discern, that much of what has been said about the *Imperfection of the vulgar Chymical Doctrine concerning Qualities*, may with easie variations be applied to some other *Hypotheses* that are of kin to that *Doctrine*, and particularly to their
A 2 Theory,

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Theory, that would derive both the Qualities of Bodies and the rest of the *Phænomena* of Nature from what they call *Acidum* and *Alkali*. For though these two differences may be met with in a great number and variety of bodies, and consequently the Consideration of them may frequently enough be of good use, (especially to Spagyrist, and Physicians, when they are conversant about the secondary and (if I may so call them) Chymical Causes and Operations of divers mixt bodies;) yet I confess I cannot acquiesce in this *Hypothesis* of *Alkali* and *Acidum*, in the latitude, wherein I find it urged and applied by the Admirers of it, as if it could be usefully substituted in the place of *Matter* and *Motion*.

The *Hypothesis*, being in a sort subordinate to that of the *tria prima*, in ascribing to two contrary *saline Principles* what vulgar Chymists do to their *Salt, Sulphur, and Mercury*; most of the objections we have made against the vulgar Chymical Doctrine, may,

may, as I lately intimated, be applied, by a little variation, to this, and therefore I shall need but to touch upon the main things that keep me from acquiescing in this *Hypothesis*.

CHAP. II.

AND *first*, it seems precarious to affirm, that in all bodies, or even in all the sensible parts of mixts, *Acid* and *Alcalizate* parts are found; there not having been, that I know, any Experimental Induction made of particulars any thing near numerous enough to make out so great an assertion, and in divers bodies, wherein Experience is vouch'd for the existence of these Principles, that Inexistence is indeed proved not by direct and clear experience, but upon a supposition, that such and such effects flow from the operations of the assumed Principles.

A 3

Some

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Some Spagyrist, when they see *Aqua fortis* dissolve Filings of Copper, conclude from thence, that the Acid Spirits of the *Menstruum* meet in the metal with an *Alcali* upon which they work; which is but an unsafe way of arguing, since good Spirit of Urin, which they take to be a volatile *Alcali*, and which will make a great Conflict with *Aqua fortis*, will, as I have elsewhere noted, dissolve filings of Copper both readily enough and more genuinely than the Acid liquor is wont to do. So when they see the Magistery of Pearl or Coral, made by dropping oil of Tartar into the solutions of those bodies made with Spirit of Vinegar, they ascribe the Precipitation to the fixt *Alcali* of the *Tartar*, that mortifies the Acidity of the Spirit of Vinegar; whereas the Precipitation would no less insue, if, instead of Alcalizat oil of Tartar, we imploy that highly acid liquor which they call *Oleum sulphuris per Campanam*.

I think also it may be doubted, whether those, I reason with, are so certain as they suppose, that at least when they can manifestly discover an Acid, for instance, in a body, the operation of that body upon another, which they judge to abound with an *Alkali*, must be the effect of a Conflict between those two jarring Principles, or, if I may so call them, Duellists. For an Acid body may do many things, not simply as an acid, but on the score of a Texture or modification, which endows it with other Qualities as well as Acidity, whose being associated with those other Qualities in some cases may be but accidental to the effect to be produced; since by one or more of these other Qualities the body may act in cases, where Prejudice may make a Chymist consider nothing but Acidity. Thus when some Chymists see an acid *Menstruum*, as *Aqua fortis*, spirit of Salt, oil of Vitriol, &c. dissolve Iron, they presently ascribe the effect to an Acidity of the liquors, whereas well dephlegmed

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Urinous Spirits, which they hold to have a great Antipathy to Acids, will, as I have tried in some of them, readily enough dissolve crude Iron even in the Cold. And on the other side, *Mercury* will not work on the filings of Iron, though this be so open a metal that even weak liquors will do it; and yet if one should urge, that Quicksilver readily dissolves Gold in Amalgamation, he may expect to be told, according to their Doctrine, that *Mercury* has in it an occult acid, by which it performs the solution; whereas it seems much more probable, that Mercury has Corpuscles of such a shape and size as fit them to insinuate themselves into the Commensurate Pores they meet with in Gold, but make them unfit to enter readily the Pores of Iron, to which Nature has not made them congruous; as on the other side the saline Corpuscles of *Aqua fortis* will easily find admission into the Pores of Iron, but not into those of Gold, to which they do not correspond as they do to the others.

And

And when a knife, whose blade is touched with a Load-stone, cuts bread and takes up filings of Iron, it does neither of them upon the score of *Alkali* and *Acidum*, but the one upon the visible shape and the stiffness of the blade, and the other upon the latent Contrivance or change of Texture produced by the operation of the Load-stone in the particles that compose the Steel.

This may perhaps be farther illustrated by adding, that when blew *Vitriol*, being beaten and finely searced, makes a white powder, that whiteness is a quality which the powder has not as being of a Vitriolate Nature. For Rock-Crystal or Venice-glass being finely beaten will have the same operation on the Eye, but it proceeds from the transparency of the body and the minuteness, multitude and confus'd scituation of the Corpuscles that make up the Powder. And therefore, if other bodies be brought by Comminution into parts endow'd with such Mechanical

10 Reflections upon the Hypothetical affections, as we have named; these aggregates will act upon the organs of Sight as white bodies.

CHAP. III.

AND this leads me to another Exception against the *Hypothesis* of the Duellists, which is, that the Framers of it seem *arbitrarily* to have assigned Provinces or Offices to each of their two Principles, as the *Chymists* do to each of their *tria prima*, and the *Peripateticks* to each of their *Four Elements*. For 'tis not enough to Say, that an *Acid*, for instance, as such, performs these things, and an *Alkali* so many others, that they divide the Operations and *Phænomena* of nature, or at least (as some, more cautious, are content to say) of mixt bodies between them; since Assertions of such great moment ought not to be advanc'd or received without
suf-

sufficient Proof. And perhaps the very distribution of Salts into *Acids* and *Alcalies* hath somewhat of arbitrary in it, since others may, without assuming much more, take the freedom to distribute them otherwise, there being not only several things wherein *Acids* and *Alcalies* agree, but also several things wherein Salts of the same denomination widely differ. As, for Instance, some *Alkalies*, according to those I reason with, are, like salt of Tartar, fixt, and will endure the violence of the fire; others, like salt of Urin or Harts-horn, are exceedingly fugitive, and will be driven up with a scarce sensible degree of Heat; some, as salt of Tartar, will precipitate the solution of Sublimate into an Orange-tawny; others, as spirit of Blood and Harts-horn, precipitate such a solution into a milky substance. Oil of Tartar will very slowly operate upon filings of Copper, which Spirit of Urin and Harts-horn will readily dissolve in the Fire.

And

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And among *Acids* themselves the difference is no less if not much greater. Some of them will dissolve bodies that others will not, as *Aqua fortis* will dissolve Silver and Mercury, but leave Gold untouched; or as *Aqua Regis*, though made without *Sal Armoniac* that dissolves Gold readily, will dissolve Mercury but scurvily, and Silver not at all. And this may happen, when the *Menstruum* that will not dissolve the body is reputed much stronger than that which does; as dephlegm'd spirit of Vinegar will dissolve Lead, reduc'd to minute parts in the cold; which is an effect that Chymists are not wont to expect from Spirit of Salt. Nay, which is more, one Acid will precipitate what another has dissolved, and contrarily; as spirit of Salt will precipitate Silver out of spirit of Nitre. And I found oil of Vitriol to precipitate bodies of divers kinds, Minerals and others, out of some acid Menstruums, particularly spirit of Vinegar.

To

To this might be added the Properties, peculiar to some particular Acids, as that *Spirit of Nitre* or *Aqua fortis* will dissolve Camphire into an Oil, and coagulate common oil into a consistent and brittle substance like Tallow; and, though it will both corrode Silver, Copper, Lead, and Mercury, and keep them dissolved, it will quickly let fall almost the whole body of Tin, very soon after it has corroded as much as it can of it. By all which, and some other like Instances, I am induc'd to question, whether the *Acidum* and *Alkali*, we are speaking of, have the simplicity that Philosophy requires in Principles; and shall be kept from wondering, if others shall think it as free for them to constitute other Principles, as 'tis for the Learned men I reason with, to pitch upon *Acidum* and *Alkali*.

And some perhaps will be bold to say, that, since the former of those Principles comprehend such a number of bodies, that are, many of them, very differing, and some of them directly
contrary

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contrary in their operations, it seems
a slight and not Philosophical Account
of their Nature, to define an Acid
by its Hostility to an Alkali, which
(they will say) is almost as if
one should define a *Man* by saying,
that he is an Animal that is at enmity
with the Serpent; or a *Lyon*, that he
is a fourfooted beast that flies from a
Crowing Cock.

CHAP. IV.

BUT although one of the chiefest
Conditions that Philosophers
may justly require in Principles, is;
that, being to explain other things,
they should be very clear themselves;
yet I do not much wonder, that the
Definitions given us of *Acidum* and
Alkali should be but unaccurate and
superficial, since I find not, that they
have themselves any clear and deter-
minate Notion or sure marks, where-
by to know them distinctly, without
which

which Chymists will scarce be able to form clear and settled Notions of them. For to infer, as is usual, that, because a body dissolves another, which is dissoluble by this or that known acid, the Solvent must also be acid; or to conclude, that, if a body precipitates a dissolved metal out of a confessedly acid Menstruum, the Precipitant must be an Alkali, to argue thus, I say, 'tis unsecure; since, not to repeat what I said lately of Copper, I found, that filings of Spelter will be dissolved as well by some Alkalies, (as spirit of Sal Armoniac) as by Acids. And bodies may be precipitated out of acid Menstruums, both by other Acids, and by liquors, where there appears not the least *Alkali*: As I have found, that a solution of Tin-glass, made in *Aqua fortis*, would be precipitated both by Spirit of Salt and by common or rain water. And as for the other grand way that Chymists employ, to distinguish Acids and Alkalies, namely by the Heat, Commotion, and bubbles that are excited, upon

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upon their being put together, that
may be no such certain sign as they
presume, they having indeed a depen-
dence upon particular Contextures
and other Mechanical affections, that
Chymists are not wont to take any
notice of. For almost any thing that
is fitted variously and vehemently to
agitate the minute parts of a body,
will produce Heat in it; and so,
though water be neither an Acid nor
an Alcalizate liquor, yet it would
quickly grow very hot, not only
with the highly acid Oil of Vitriol,
but (as I have more than once pur-
posely tried and found) with the fie-
ry Alcalizat Salt of Tartar. And 'tis
to be noted, that neither in the one
nor the other of these Incalcescent
mixtures, there is produced any such
visible or audible conflict, as, accord-
ing to the Doctrine of the Chymists
I reason with, one would expect. And
as for the production of bubbles,
especially if accompanied with a
hissing noise, neither is that such a
certain sign as Chymists imagine: For
the

the production of bubbles is not a necessary effect or concomitant of Heat excited by Conflicts, but depends very much upon the peculiar Disposition of Bodies put together to extricate, produce, or intercept particles of Air, (or *Steams*, for the time equivalent to them;) and therefore as Oil of Vitriol, mixt in a due proportion with fair water, may be brought to make the water too hot to be held in ones hand, without exciting bubbles; so I have found by trials purposely made, that Alcalizat Spirit of Urine drawn from some kinds of Quicklime, being mixt with Oil of Vitriol moderately strong, would produce an intense Heat, whilest it produced either no manifest bubbles at all, or scarce any, though the Urinous Spirit was strong, and in other Trials operated like an *Alkali*; and although also with Spirit of Urin, made *per se* the common way, the oil of Vitriol will produce a great hissing and a multitude of conspicuous bubbles.

B

On

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On the other side I have sometimes, though not so constantly, found, that some Acid Spirits, especially that of Verdigrease made *per se*, would, when poured upon Salt of Tartar, make a Conflict with it, and produce a copious froth, though we observed it not to be accompanied with any manifest Heat. And I elsewhere mention two bodies, upon whose putting together numerous bubbles would, for a long time, and not without noise, be generated, and succeed one another, though I could perceive no Heat at all to accompany this Tumult.

As for the *Tast*, which by many is made a great Touchstone, whereby to know Acids and Alcalies, I consider that there is a multitude of mixt bodies, wherein we can so little discern by the *Tast*, which of the Principles is Predominant, that this Sense would not oblige one to suspect, much less to conclude, there were one grain of either of them to be found there; such bodies are Diamonds and Rubies, and
most

most Gems, besides many ignobler Stones, and Gold and Silver and Mercury, and I know not how many other bodies. On the other side, there are bodies that abound with Acid or Alcalizat Salts, which either have no Taste, or a quite differing one from that of the Chymical Principle. As though Venice-glass be in great part composed of a fixt *Alkali*; yet to the Tongue it is insipid, and Crystals of Lunc and of Lead made with *Aqua fortis*, and containing great store of the Acid particles of the *Menstruum*, have nothing of Acidity in the mouth, the latter having a saccharine sweetness, and the former an extream bitterness. And even in Vegetable substances that have a manifest Taste, 'tis not so easie to know by that, whether it be the Acid or the Alcalizat Principle that is predominant in them; as in the Essential oils of Spices and other Vegetables. And in the gross Empereumatical Oils of Woods, and even in high Rectified Spirit of Wine,

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which therefore some will have to be
an Alcalizat liquor, and others list it
among Acids, though I did not find it
neither to be destroyed or much al-
tered by being put upon Coral or salt
of Tartar, as would happen to an acid
Menstruum, nor yet by being digested
with and distilled from sea Salt, as
might be probably expected from an
Alcalizat one: And among those very
bodies which their Tasts perswade
Chymists to reckon amongst Acids, one
may (according to what I formerly
noted) observe so great a difference
and variety of relishes, that, perhaps
without being too severe, I may say,
that if I were to allow Acids to be
One Principle, it should be only in
some such Metaphysical sense, as that
wherein Air is said to be One Body,
though it consist of the associated ef-
fluviums of a multitude of Corpuscles
of very differing Natures, that agree
in very little save in their being mi-
nute enough to concur to the Com-
position of a fluid aggregate, consist-
ing

ing of flying parts. But having dwelt longer than I intended on One Objection, 'tis time that I proceed to those that remain.

CHAP. V.

ANother particular, I am unsatisfied with in the *Hypothesis* of *Alkali* and *Acidum*, is, that 'tis in divers cases either needless or useles to explain the *Phænomena* of Qualities, there being several of these produced, destroyed, or altered, where there does not appear any accession, recess, or change of either of those two Principles; as when fluid water by hard beating is turn'd into consistent froth, and when transparent red Coral is, barely by being beaten and sifted finely, changed into a white and opacous powder; and as when a very flexible piece of fine silver being hammer'd is brought to have a brisk spring, and after a while will, instead

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of continuing malleable; crack or
cleave under the hammer; and as
when (to dispatch and omit other in-
stances) a sufficiently thin leaf of
Gold, held between the Light and the
Eye, appears green.

Another thing (of kin to the for-
mer,) that I like not in the Doctrine
of *Acidum* and *Alkali*, is, that though
the Patrons of it, whilst they would
seem to constitute but two Principles,
are fain (as I lately intimated) to make
I know not how many differing sorts
of Acids, besides some variety of Alca-
lies; yet their Principles are too few
and narrow to afford any satisfactory
explication of the *Phænomena*. For
I fear, 'twill be very difficult for them
to give a Rational Account of Gravi-
ty, Springiness, Light, and Emphatical
Colours, Sounds, and some other
Qualities that are wont to be called
manifest; and much more of several
that are confest to be occult, as Ele-
ctricity, and Magnetism; in which
last I see not, how the affirming that
there

there is in the Magnet an Acid and an Alkali, and that these two are of contrary Natures, will help to explain, how a Load-stone does, as they speak, attract the same end of a poised needle with one of its Poles, which 'twill drive away with the other, and determine that needle when freely placed, to point North and South, and enable it to communicate by its bare touch the same Properties, and abundance of other strange ones, to another piece of Steel. But I forbear to alledge particular Examples referable to the several Qualities above-mentioned, whether manifest or hidden, because that in great part is already done in our Notes about particular Qualities, in which 'twill appear how little able the employing of *Alkali* and *Acidum* will be to afford us an account of many things. And though I enlarge not here on this objection, yet I take it to be of that importance, that, though there were no other, this were enough to shew that

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the Hypothesis that is liable to it, is Insufficient for the explication of Qualities; and therefore 'twill not I presume be thought strange that I add, that, as for those that would extend this narrow Chymical Doctrine to the whole object of Natural Philosophy, they must do more than I expect they will be able before they can make me their Profelyte, there being a multitude of *Phænomena* in nature (divers whereof I elsewhere take notice of in reference to the Chymists Philosophy) in which what *Acidum* and *Alcali* have to do, I confess I do not understand.



CHAP.

CHAP. VI.

THE last thing (which comprizes several others) that seems to me a defect in the Doctrine of *Alkali* and *Acidum*, is, that divers if not most of those very things that are pretended to be explicated by them, are not satisfactorily explicated, some things being taken into the explications that are either not fundamental enough or not clearly intelligible, or are chargeable with both those Imperfections.

And first I am dissatisfied with the very fundamental Notion of this Doctrine, namely a supposed Hostility between the tribe of Acids and that of Alkalies, accompanied, if you will have it so, with a friendship or sympathy with bodies belonging to the same tribe or Family. For I look upon Amity and Enmity as Affections of Intelligent Beings, and I have
not

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not yet found it explained by any, how those Appetites can be placed in Bodies Inanimate and devoid of knowledge, or of so much as Sense. And I elsewhere endeavour to shew, that what is called Sympathy and Antipathy between such bodies does in great part depend upon the actings of our own Intellect, which, supposing in every body an innate appetite to preserve it self both in a defensive and an offensive way, inclines us to conclude, that that body, which, though designlesly destroys or impairs the state or texture of another body, has an Enmity to it, though perhaps a slight Mechanical change may make bodys, that seem extreamly hostile, seem to agree very well and cooperate to the production of the same effects. As if the acid spirit of Salt and the volatile *Alkali* (as they will have it) that is commonly called Spirit of Urine be put together, they will, after a short though fierce conflict, upon a new contexture unite together

gether into a Salt, little, if at all, differing from Sal Armoniac, in which the two reconciled Principles will amicably join in cooling of water, dissolving some metalline bodys, and producing divers other effects. And so, if upon a strong solution of Salt of Potashes or of Salt of Tartar, good Spirit of Nitre be dropt in a due proportion, after the Heat and Tumult and Ebullition are over, the Acid and the Alkalizat Salts will convene into such a Concretion as Salt-peter, which is taken to be a natural body, either homogeneous, or at least consisting of parts that agree very friendly together, and conspire to constitute the particular kind of Salt that Chymists call Nitre.

But the Sympathy and Antipathy that is said to be betwixt Inanimate bodys, I elsewhere more particularly consider, and therefore I shall now add in the second place, That the Explications made of *Phænomena* according to the Doctrine of *Alkali* and

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and *Acidum* do not, in my apprehension, perform what may be justly expected from Philosophical Explications. 'Tis said indeed, that the *Acidum* working on the *Alkali*, or this upon that, produces the effect proposed; but that is only to tell us, what is the Agent that operates, and not the Manner of the operation, or the means and process whereby it produces the effect proposed, and 'tis this *modus* that Inquisitive Naturalists chiefly desire to learn. And if it be said, that it is by the mutual hostility of the Principles that the effect is produced, it may be answered, that besides, that that hostility it self is not, as we have just now observed, a thing clear, if so much as Intelligible; this is so general and indeterminate a way of explicating things, as can afford little or no satisfaction to a searching and cautious Naturalist, that considers how very numerous and very various the *Phænomena* of Qualities are.

CHAP.

CHAP. VII.

TO clear up and to countenance what I have been now saying, I shall only take notice of some few obvious Phenomena of one of the most familiar Operations wherein Acidum and Alkali are supposed to be the grand Agents. 'Tis known to the very Boys of Chymists, that *Aqua Regis* will dissolve Gold, Copper, and Mercury, and that with these metals, especially with the second, it will produce an intense degree of heat. If now the Cause of this Heat be demanded, it may be expected, that the Patrons of the Duellists will answer, that 'tis from the action of the Acid salts of the Menstruum upon the Alkali they meet with in the Metalls. But not to mention how many things are here presumed, not proved; nor that I know some Acid Menstruums, and
some

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some much more evidently Alkalize Bodys than these Metals are, which yet do not upon their mixtures produce any sensible heat; not, I say, to mention these, it is easie to discern, that this answer names indeed two supposed efficient of Heat, but does not explicate or declare *how* these Agents produce that Quality, which depends upon a certain vehement and various agitation of the singly insensible parts of Bodys, whether the Duellists, or any other, though very differing, Causes put them into a motion so modified. And therefore Gold and Copper by bare Concussion may be brought to an intense degree of heat without the accession of any acid parts to work upon them. But then further, when we are told, that *Aqua Regis* by its Acidity working on the Metalline Alkali makes a dissolution of the Metal; I am told indeed what they think to be the Agent in this change, but not at all satisfied how

how this Agent effects it ; for, Copper being a very hard metal, and Gold generally esteemed by Chymists the closest and compactest Body in nature, I would gladly know, by what power and way such weak and probably either brittle or flexible bodys as acid Salts, are enabled with that force to disjoin such solid and closely coherent Corpuscles as make up the visible masses of Copper and Gold, nay, and scatter them with that violence as perhaps to toss up multitudes of them into the air. And since in the dissolution of these Metals there is another Phænomenon to be accounted for, as well as the forcing of the parts asunder, namely the sustentation of the Metal in the Menstruum, the Chymists would have much informed me, if they had well explained, how their Acidum and Alkali is able to sustain and give fluidity to the Corpuscles of the dissolved Metal, which though it be but
Copper

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Copper, is nine times as heavy as a bulk of water equal to it, and if it be Gold, is nineteen times heavier than the Liquor that must keep it from sinking; and at least divers times heavier in specie than the Salts, that are mingled with the aqueous parts, can make the Menstruum composed of them both. Whereas Trial has assured me, that, if a piece of Wax or any other such matter be made by less than the hundredth part heavier than an equal bulk of Water, it will, when thoroughly immersed, fall to the bottom and rest there. I might also ask a further Question about these Dissolutions, as why, whereas *Aqua Regis* dissolves Mercury without being much changed in colour by it, Gold retains its own Citrinity or yellowness in the solvent, and the solution of Copper is of a colour, which being greenish-blew is quite differing from that of the metal that affords it, as well as from that of the solvent? And I might

might recruit these with other Queries not impertinent, but that these may suffice (for a sample) on this Occasion, and allow me to conclude this Chapter, by representing One thing which I would gladly recommend and inculcate to you, namely, that *Those Hypotheses do not a little hinder the progress of Humane knowledge that introduce Morals and Politicks into the Explications of Corporeal Nature, where all things are indeed transacted according to Laws Mechanical.*

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CHA P. VIII.

I Might easily have been more copious in the Instances annext to the foregoing Animadversions, but that, being desirous to be short as well as clear; I purposely declined to make use of divers others, that seemed proper to be employed, and indeed might safely enough have been so, because those I have *mentioned*, and especially those, (which make a great part of them) that are Mechanical, are not liable to the same exceptions, that I foresaw might be made to elude the force of the Examples I *passed by*. And though I think I could very well make those foreseen Objections appear groundless or unsatisfactory; yet that could scarce be done without engaging in Controversies that would prove more tedious than I judged them necessary.

And

And yet, although what I have said in this Excursion be but a part of what I could say, I would not be thought to have forgot what I intimated at the beginning of it. For though the Reasons I alledged keep me from acquiescing in the Doctrine of *Alcali* and *Acidum*, as 'tis proposed under the notion of a Philosophical *Hypothesis*, such as the Cartesian or Epicurean, which are each of them alledged by their embracers to be Mechanical, and of a very Catholick extent; yet I deny not, that the Consideration of the Duellists (or the two jarring Principles of *Alcali* and *Acidum*) may be of good use to Spagyrist and Physitians, as I elsewhere further declare. Nor do I pretend by the past discourse that questions one Doctrine of the Chymists, to beget a general contempt of their Notions, and much less of their Experiments. For the operations of Chymistry may be misapplied by the er-

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roneous Reasonings of the Attists
without ceasing to be themselves
things of great use, as being appli-
cable as well to the Discovery or
Confirmation of solid Theories, as
the production of new *Phænomena*,
and beneficial effects. And though
I think, that many *Notions* of *Para-*
celsus and *Helmont* and some other
Eminent Spagyrist are unsolid, and
not worthy the veneration that their
Admirers cherish for them; yet di-
vers of the *Experiments*, which ei-
ther are alledged to favour these
notions, or on other accounts are to
be met with among the followers of
these men, deserve the curiosity if
not the esteem of the Industrious In-
quirers into Natures Mysteries.
And looking upon Chymistry in
gross as a Discipline subordinate to
Physiques, even Mechanical Philo-
sophers may justly, in my opinion,
think favourably of it, since, what-
ever Imperfections, or, if they please,
Extravagancies there may be in
the

the Principles and Explications of *Paracelsus* or other Leading Artists, these faults of the Theoretical part may be sufficiently compensated by the Utilities that may be derived from the Practical part. And this I am the rather induced to say, because the Experiments, that Chymistry furnishes, may much assist a Naturalist to rectifie the Erroneous Theories that oftentimes accompany Them, and even those (Mistakes) that are endeavour'd to be evinced by them.

And (to conclude) Chymistry seems to deal with men in reference to Notions , as it does in reference to Metals , assisting wary men to detect the Errors , unto which it may have misled the unwary : For the same Art that has taught some to impose on others, (and perhaps themselves first) by blanching Copper, imitating Gold, &c: does also supply Say-masters
and

and Refiners, with the Means, by the Cupel, Cements, *Aqua fortis*, &c. to examine, whether Coins be true or false, and discover Adulterate Gold and Silver to be Counterfeit.

FINIS.

